

# **EMS Strategies for Pandemic Flu Response**

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**Overview-** The current expanding areas of the world with active “bird flu” has raised the profile of a possible pandemic flu outbreak in the United States. While bird flu in its current form is not easily transmissible from birds to humans or humans to humans, the concern is based on the ability of viruses to mutate and potentially become more transmissible within humans. The pandemic scenario presents many challenges to the health care system because it is anticipated that:

- A very high percentage of the population could be ill at the same time
- A similarly high percentage of the health care workforce could become ill
- Other infrastructure systems EMS relies upon (fuel supply, food supply, equipment supply, etc.) could be interrupted for a significant time period.
- Typical mutual aid at local, state and national levels may become overwhelmed.

Strategies for managing a pandemic event are largely public health measures such as early identification of the illness, isolation and quarantine, etc.

There is a great deal that can be done by EMS organizations, hospital partners, and VTEMS to prepare for the possibility of a pandemic outbreak.

### **1. Protect your workforce-**

- Use Appropriate PPE
  - Gloves
  - Masks (N-95 likely the preferred protection until guidance for use of a surgical mask is received from VTEMS)
  - Gowns and eye protection for aerosolizing procedures
- Use excellent hygiene
  - Wash hands with soap, water or alcohol based foam
  - Clean all equipment and surfaces after every patient contact
- Encourage your staff not to come on duty if they are having symptoms of illness
- Follow specific CDC and VTEMS guidance related to the outbreak

### **2. Reduce exposures**

- Approach patients slowly in cases of unknown illness or a report of flu like symptoms- Assure that PPE is worn
- Apply a surgical mask to patients who can tolerate them.
  - Administer oxygen via full face mask if indicated or the patient cannot tolerate a surgical mask.
- Limit crew size and contact with the patient
  - One first responder per patient unless additional assistance is needed
  - No more than two personnel on ambulance crews for scene calls and transports to the hospital of patients with flu like symptoms.
  - Minimize contact time if possible.

- Maintain a distance of more than 2 feet from the patient's mouth and nose whenever possible.
- Minimize the exposure of support agencies (fire/police) whenever possible. Request only the minimal resources needed and limit exposure times and distances whenever possible.
- Use the exhaust ventilation settings in the patient compartment of the ambulance
- Close the door between the driver and patient compartment of the ambulance

### **3. Harden your response capacity**

- Consider steps to:
  - Assure uninterrupted fuel supplies for ambulances
  - Maintain additional quantities of expendable supplies such as PPE, oxygen and delivery supplies, suction unit disposables, IV supplies, etc.
  - Maintain a supply of food staples or other feeding arrangements at your station to avoid personnel needs to shop or eat out while on duty
  - Assure adequate supplies of hand hygiene, laundry and other cleaning materials
  - Encourage your crew members to take personal steps in their homes to avoid illness and stay response ready
    - Stockpiling food and supplies
    - Keep personal cars fueled at or above a half tank
    - Minimize large group interactions in public or private gatherings

### **4. Plan internally and with partner agencies**

- Reduce the number of personnel who respond to calls (particularly illness calls). Two person ambulance crews and one first responder max initial response.
- Coordinate between ambulance and first response agencies to assure that priority is given to staffing ambulance crews.
- Discuss your hospital's plans for handling surge capacity during a pandemic, including alternate transport destinations.
- Consider how you will maintain response readiness if a significant portion of your workforce (10% to 25% at any time during the outbreak) is ill. Plan for extended schedules, cancellation of stand-by coverage at low risk events, etc.
- Establish internal mechanisms for rapid communication of information to your crews. Establish pager groups, e-mail lists, phone trees, conference call arrangements, squad website updates, or other mechanisms.
- Establish internal mechanisms for monitoring which of your personnel have symptoms of illness and will not be available for service. Daily checks at change of shift, etc.

### **5. State Support**

- If a Pandemic flu event occurs, the Vermont EMS Office within the Vermont Department of Health in cooperation with the Vermont Emergency Management Agency will be supporting a Health Operations Center and the VEM Emergency Operations Center to coordinate the statewide response of the healthcare system.

- Use of the Health Alert Network (HAN)- This is a communications tool that will allow for real time dissemination of information during a Pandemic flu or other public health event. It is very important for key squad and EMS District contacts to register their contact information on the HAN when contacted.
- Pre-deployment of N-95 masks- After a threat analysis of high profile possibilities for major incidents in Vermont, a group of first responders (fire, police, EMS) epidemiologists and VOSHA was assembled to consider PPE requirements. The highest appropriate level of respiratory protection for EMS personnel recommended from that group is N-95. The scenarios that lead to N-95 use are currently considered of low probability but high criticality. As a result, a supply of N-95 masks have been purchased and strategically placed around VT so that EMS organizations can have access in the event of an infectious disease outbreak requiring this level of protection. The VT EMS Office is working with VOSHA and others to organize fit tester training for EMS district level designees at the 2007 VTEMS Conference.
- Task Force Organization- VT EMS is currently working with a group of EMS and Homeland Security representatives on a model for organizing EMS task forces (5 ambulance groups) within each of the four State Homeland Security Regions. This organizational model would represent a known capacity and commitment for response to major events in state. Depending upon the severity and progression of a pandemic event in Vermont, task forces would represent one form of mutual aid if the outbreak was not statewide.
- Surge Capacity- Hospitals in VT are organizing resources to absorb additional patients based on their percentage of the total hospital bed capacity statewide. Other provisions are being made to use alternative sites for patient management beyond the existing hospitals. Management of patient surge will be coordinated locally until capacity is overwhelmed and then by a patient coordination unit within VT Emergency Management if necessary.
- 9-1-1 integration- VT EMS will be discussing with VT E-9-1-1 the use of protocols to minimize demand on the EMS system during a pandemic event. The concept is to use a triage model that might provide alternatives to an EMS response for low risk calls during an overwhelming pandemic event.
- Scope of Practice Changes or reductions in crew requirements- The EMS rules provide authority for the Commissioner of Health to temporarily authorize ambulances and first responder services to operate in ways not otherwise authorized by rule. This could include variations in scope of practice, crew configurations, or other requirements that might facilitate operations during a major pandemic type event. Information about any such special authorizations would be communicated via the HAN
- Vaccination and anti-viral medications- There is currently no vaccine for bird flu. Part of the Department's pandemic flu plan is to provide vaccinations or anti-viral medications to first responders if such medications are available and would be of use in protecting the workforce. The model for administration is through locally assembled clinics in or around the Health Department District Offices. Information on clinics and vaccination or anti-viral indications will be communicated in real time via the HAN.